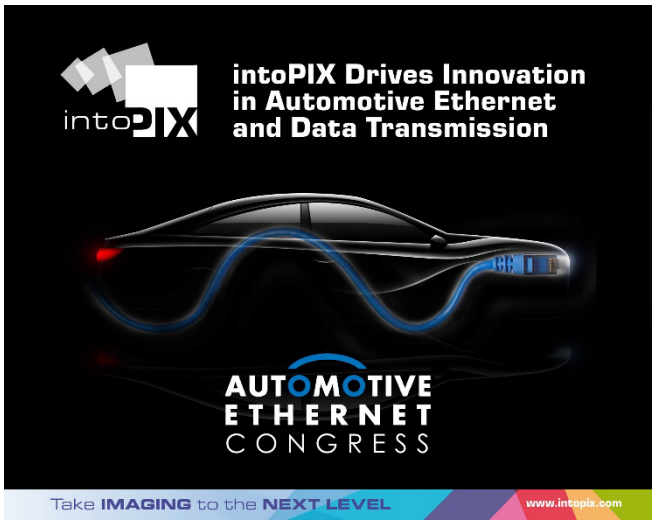
intoPIX Drives Innovation in Automotive Ethernet and Data Transmission

Low-latency and low-power compression for Ethernet Networks for Connected, Intelligent, and Autonomous Vehicles

Mont-Saint-Guibert, Belgium, February 12, 2025 – As the automotive industry evolves toward more connected, intelligent, and autonomous vehicles, efficient handling of video and sensor data is paramount. intoPIX, a leader in low-latency and low-power image compression, stands as an indispensable partner for advancing automotive technologies. By addressing critical challenges in the strategic shift from traditional hardware-based solutions to a new software-centric approach—the **Software-Defined Vehicle (SDV)**—intoPIX empowers the development of next-generation automotive systems.

"*Cutting-edge compression technologies like TicoRAW and TicoXS are a game-changer for Software-Defined Vehicles; enabling efficient video data handling, reducing bandwidth on Ethernet network and accelerating real-time decision-making*, paving the way for smarter and more connected vehicles" explains Justine Hecq, Market Lead for the Automotive, Machine Vision and RAW Camera Technology Group at intoPIX.

Three Use Cases Driving Automotive Excellence



1. **Camera Sensors**: As vehicles increasingly rely on high-resolution cameras for ADAS and autonomous driving, efficient management of RAW Bayer data is crucial. TicoRAW compresses sensor data by up to 10x without compromising quality, ensuring optimal transmission and processing for precise decision-making.

2. **Recording**: For advanced safety systems and development purposes, vast amounts of video data must be stored and analyzed. intoPIX technologies simplify this by reducing storage needs and power consumption while maintaining the integrity of recorded data, making it ideal for continuous improvement of ADAS models.

3. **Cloud Infrastructure**: intoPIX's lightweight compression optimizes the transmission of high-resolution video streams from vehicles to the cloud. This enables efficient updates of AI models and ensures that cloud-based systems remain scalable and cost-effective.

Unlocking the Potential of Ethernet in Modern Vehicles

Ethernet is rapidly becoming the backbone of in-vehicle connectivity, enabling reliable, high-speed communication between components. intoPIX's TicoRAW and TicoXS technologies are specifically designed to maximize the potential of Ethernet networks:

- **Efficient Bandwidth Usage**: Reduce bandwidth requirements by up to 10x, ensuring seamless transmission of high-resolution video streams over Ethernet.

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- **Low Latency**: Ensure real-time video processing (line-based latency in hardware and less than 1 frame in software) for ADAS and autonomous systems, critical for safety and performance.

- **Scalable Integration**: TicoXS and TicoRAW's are compatible with both software (CPU/GPU) and hardware (FPGA/ASIC), offering maximum flexibility for modern vehicle architectures.

Join intoPIX at the Automotive Ethernet Congress

intoPIX will showcase these groundbreaking technologies at the Automotive Ethernet Congress from February 18 to 20, 2025, in Munich, Germany. Visit the intoPIX booth to see how TicoRAW and TicoXS simplify data transmission, reduce costs, and accelerate innovation in connected and autonomous vehicles. Discover why intoPIX is the preferred partner for scalable and efficient automotive solutions.

About intoPIX

intoPIX creates and licenses innovative image processing and compression solutions. We deliver unique IP-cores and efficient software solutions to manage more pixels, preserve quality with no latency, save cost & power and simplify storage and connectivity. We are passionate about offering people a higher-quality image experience. Our solutions open the way to new automotive designs, reducing costs, replacing uncompressed video, and always preserving the lowest latency with the highest quality.
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